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COPPER SPUTTERING TARGET ASSEMBLY AND METHOD OF MAKING SAME

5 ABSTRACT OF THE DISCLOSURE

Described is a sputtering target assembly of high purity copper diffusion bonded to a precipitation hardened aluminum alloy backing plate via an intermediate layer of a CuCr alloy and in which the copper contains a micro alloy addition of at least one of Ag, Su, Te, In, Mg, B, Bi, Sb and/or P. Also disclosed is a method that includes preparation of a master alloy for addition to high purity copper and fabricating, heat treating and diffusion bonding processes to produce a sputtering target assembly with a stable fine-grained target microstructure.

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